

NUECES RIVER AUTHORITY

Water For South Texas



**NRA – State Agency Territorial Jurisdiction
17,500 Square Miles**

Enabling Legislation includes Water Supply

2025 – NRA will be 90 years old

**The Basin – The BIG Region Needs Water
Projected Deficits**

2030 – 241 MGD

2070 – 410 MGD



➤ **Importance of Port to Coastal Bend**

Importance of Southwest Texas to the Entire State

Need of Industry to obtain adequate water supply

Deeper dive – led me to explore NRA's role



Discussions with Legislators

Texas Water Plan - Cities and District Projects

Regional Approach

Fewer – Larger – Economies to Scale – Less \$



Explored:

Ground Water – Fresh & Brackish

Reservoir Capacity – Methods to Maximize

New Reservoir Development

Seawater Desalinization



Fresh Groundwater

Evangeline Aquifer

Limited – 24 to 25 MGD

Expensive - \$7000/Acre/Foot

Additional Treatment Required

Concerns with Effects on Local Muni. Systems



Brackish Groundwater

Pockets of Availability

Deeper – Higher Extraction Cost

Reverse Osmosis Treatment Required

Corrosive and Scale Forming

Sustainability



Surface Water

Existing Reservoirs

Dredging – Lake Corpus Christi

#1 Candidate in SW

Enhancement – Water Shed

Example – Transfer Water

Brush Removal – Restore Springs

Improve Runoff



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POCC has permits – Not a water purveyor

NRA approached POCC –

NRA Assumes Permits for Harbor Island

NRA forms a P3 to Build & Operate Plant

NRA's Proposed Plan



P3 = Public – Private - Partnership

Define



NRA Holds Contracts with:

- Program Manager
- Port of Corpus Christi (Reassign Diversion / Discharge Permits over the life of the project)
- Contract w/Private Company (Design-Build-Operate Treatment / Diversion / Discharge Assets while debt exists)
- Design Engineer (Design Treated Water Pump Station / Conveyance)
- Contractor (Construct-Commission Treated Water Pump Station / Conveyance)
- Treated Water Customers (Municipalities / Industries over the life of the project)

Port of Corpus Christi:

- NRA (Assumes Diversion / Discharge Permits over the life of the project)
- Project Company (Land Lease while debt exists)

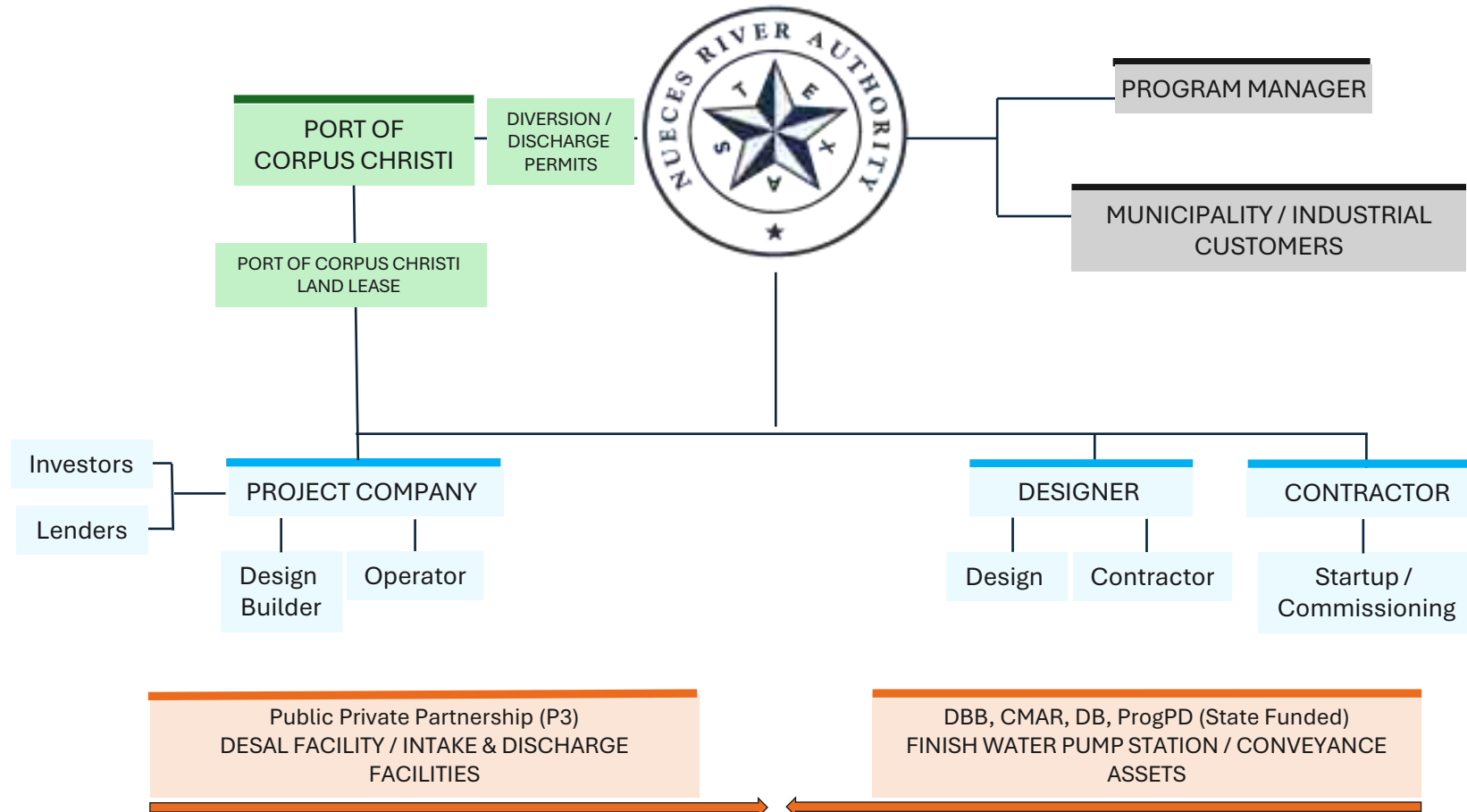
Project Company:

- Lenders
- Investors
- Design Builder
- Operator

Contract Structure While PS Debt Exists

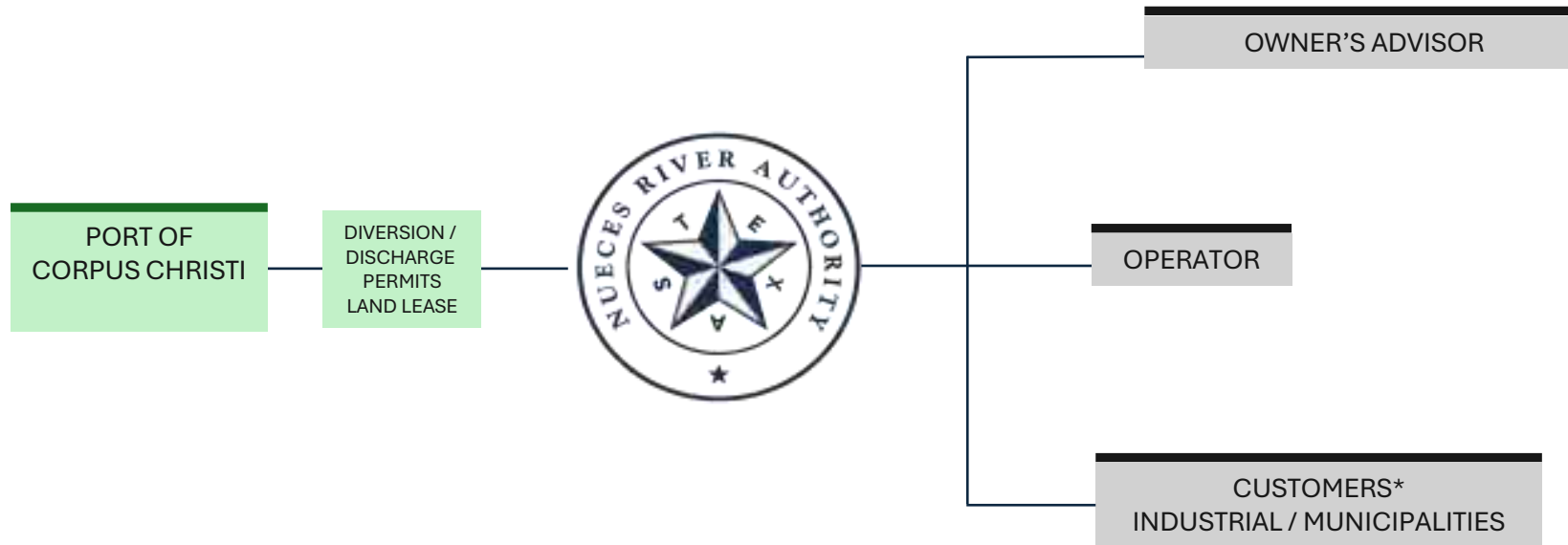


With Debt





After Debt





NEXT

Issued RFQ for Project Advisor – Board of Directors Authorized NRA Ex. Director to Contract with Black & Veatch – 60 years of Desal Experience Worldwide

Discussing with Municipalities and Industries wanting to locate in South Texas –

Obtaining Water Commitments – (Water Reservation Fees)

Will soon Issue an RFP for a Private Partner (P3) – Contract for design, construction, and operating the seawater desalinization facility.



NEXT Continued

Issue - RFQ for Conveyance Program Manager – Oversee Design of Conveyance Pipeline for potable water delivery

Divide Conveyance System into parts – Storage & Pumping Stations; Pipeline into segments

Issue RFQ for Conveyance Design – Contract with 4 to 5 engineering firms to design pipeline.

Issue RFQ for Inspection Services – Contract for inspection of all facilities.

Procure Construction Companies experienced in water utility construction to build project.



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